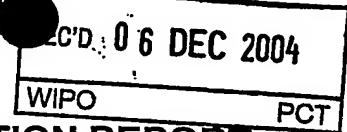




PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference CA020068		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/GB 03/04248		International filing date (day/month/year) 01.10.2003	Priority date (day/month/year) 04.10.2002
International Patent Classification (IPC) or both national classification and IPC G06F17/30			
Applicant: INTERNATIONAL BUSINESS MACHINES CORPORATION			
<p>1. This International preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 3 sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>			
Date of submission of the demand 24.10.2003		Date of completion of this report 06.12.2004	
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016		Authorized Officer de Castro Palomares, Telephone No. +31 70 340-4665 	

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB 03/04248

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-39 as originally filed

Claims, Numbers

1-9 as amended (together with any statement) under Art. 19 PCT

Drawings, Sheets

1/21-21/21 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB 03/04248

5. ☒ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

see separate sheet

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-9
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-9
Industrial applicability (IA)	Yes: Claims	1-9
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item I**Basis of the report**

1.- The amendments filed with the International Bureau under Article 19(1) dated 12 November 2004, introduce subject-matter which extends beyond the content of the application as filed, contrary to Article 19(2) PCT. The amendments concerned are the following: the method of claim 1 'for synchronizing requests from said associated portlets to generate synchronized requests to said web application'.

As a consequence, further examination is carried out for the set of claims disregarding this amendment.

Re Item V**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1.- A plurality of independent claims have been filed which is not in accordance with Article 6 PCT with respect to clarity and **conciseness** since the number of independent claims does not appear to be justified by the nature of the invention and lack of clarity of the claims as a whole arises since the plurality of independent claims makes it difficult to determine the matter for which protection is sought and places an undue burden on others seeking to establish the extent of the protection.
Hence the set of claims does not meet the requirements of Article 6 PCT.

2.- Reference is made to the following document/s/:

D1: LECTION D B ET AL: "WebSphere Portal programming: Portlet application programming, Part 2. Give and take -- portlet messaging techniques" IBM, 1 March 2002 (2002-03-01), XP002275896

D2: WO 00/52572 A (SONY ELECTRONICS INC) 8 September 2000 (2000-09-08)

3.- The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 does not involve an inventive step in the sense of Article 33(3) PCT.

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document):
apparatus for displaying to a user a web portal for a web application, said web portal

displaying a plurality of associated portlets, sharing information with each other, accessible by said user (see D1, Introduction); the apparatus comprising:

a portal server for operating a web portal to provide access to said web application (see D1, Introduction, last paragraph),

a portlet application for operating on said portal server, for managing a collection of associated portlets (see D1, Portlet messaging basics, second paragraph),

said portlet application including

means to initiate portlets on requests of a user to access said web application (see D1, Portal event and messaging process, first step of event handling)

a portlet application communication client for communicating between said portlet and web application to convey user requests received from said associated portlets to said web application (see D1, 'Sample Portlets').

The subject-matter of claim 1 therefore differs from this known prior art in the following features:

- means to manage a portlet application session object for said portlets; and
- a portlet application session object data store controlled by said portlet application session object for saving parameters from user requests for associating said portlets with said portlet application session object.

The problem to be solved by the present invention may therefore be regarded as the synchronization of multiple requests or responses between portlets of a given portlet application.

The solution proposed in claim 1 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

The fact that the claim is related to portlets is not relevant for the purpose of synchronization and portlet should be read as 'application'.

The concept of synchronization between applications or modules of the same application is well known particularly in the fields of data retrieval (databases) and also in operating systems that have been dealing with this problem since their beginnings.

It is also well known that the two obvious synchronization techniques are the messaging (e.g. shown in D1) and the use of a shared memory resource (e.g. shown in D2).

The prior art cited implements messaging, and the present application implements a shared memory resource (the portlet application object with data store and means to manage it). Therefore the difference appears to lie in an obvious and consequently non inventive selection among a limited number of known possibilities.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB 03/04248

The same reasoning applies, *mutatis mutandis*, to the subject-matter of the corresponding independent claim 9 which therefore is also considered not inventive.

4.- Document D2 discloses a method for sharing information between a plurality of applications (see D2, page 4, line 22 to page 6, line 13) comprising granting access for each of said plurality of associated applications to a data store; permitting each of said plurality of associated applications to write and to read data from said data store (see D2 page 17, line 22 to page 18, line 23).

The subject-matter of claim 4 therefore differs from this known prior art in the fact that is in the context of portlets. However portlets are just 'applications' or software modules and in any case, the person skilled in the art would apply the teachings of D2 (in the context of applets) to portlets without the use of any inventive skills.

Therefore claim 4 does not involve an inventive step in the sense of Article 33(3) PCT.

The same reasoning applies, *mutatis mutandis*, to the subject-matter of the corresponding independent claims 5, 6 and 7 which therefore are also considered not inventive.

5.- Remaining dependent claims do not appear to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step.

CLAIMS

1. Apparatus for displaying to a user a web portal for a web application, said web portal displaying a plurality of associated portlets, sharing information with each other, accessible by said user; the apparatus comprising:

a portal server (201) for operating a web portal to provide access to said web application;

a portlet application (204) for operating on said portal server, for managing a collection of associated portlets;

said portlet application including:

means to initiate portlets on requests of a user to access said web application;

means to manage a portlet application session object (208) for said portlets;

a portlet application session object data store (302) controlled by said portlet application session object for saving parameters from user requests for associating said portlets with said portlet application session object; and

a portlet application communication client for communicating between said portlet application session object and said web application to convey user requests received from said associated portlets to said web application, and for synchronizing requests from said associated portlets to generate synchronized requests to said web application.

2. The apparatus of claim 1 wherein said portlet application assigns a common key to each portlet associated with a portlet application session object.

3. The apparatus of claim 1 including a user session information table adapted to connect to multiple web applications with said portlet application session object.

4. Apparatus for sharing information between multiple associated portlets in a web portal comprising:

a portlet application for managing said multiple associated portlets; a portlet application data store; and

means for granting read/write access to said data store by said multiple associate portlets to enable said portlets to exchange data among each other.

5. A portlet server capable of operating on a portal server for hosting multiple associated portlets in a web portal comprising:

means for managing said multiple associated portlets;

means for managing a portlet application session object;

a portlet application data store managed by said portlet application session object for granting read/write access to said data store to said multiple associate portlets to enable said associated portlets to exchange data among each other.

6. A portlet application capable of operating on a portal server for hosting multiple associated portlets in a web portal accessible by a user, comprising:

portlet application means for managing said multiple associated portlets;

portlet application means for managing a portlet application session object for said user; and

portlet application means for granting said key to each associated portlet for controlling access to said portlet application object.

7. A portlet application capable of operating on a portal server for hosting multiple associated portlets in a web portal accessible by a user, comprising:

portlet application means for managing said multiple associated portlets;

portlet application means for creating and managing a portlet application session object for said user;

portlet application means for creating and managing a key for said user for said portlet application session object; and

portlet application means for granting said key to each associated portlet for controlling access to said portlet application object.

8. The portlet application of claim 7 wherein one portlet application is assigned to each user and one key is assigned respectively for each user to respective portlet application objects for each portlet application.

9. An article comprising:

a computer readable signal bearing medium; and

computer program code means recorded on said medium adapted to implement the apparatus of any of claims 1 to 4.